

ABSTRACT

A corrosion-inhibited fire retardant composition is provided that comprises at least one ammonium polyphosphate, at least one suspending agent, at least one phosphonate selected from a group consisting of aminotri(methylenephosphonic acid), 1-hydroxyethylidene-1,1-diphosphonic acid, hexamethylenediaminetetra(methylenephosphonic acid), diethylenetriaminepenta(methylenephosphonic acid), salts thereof, and mixtures thereof and a corrosion inhibiting system. The corrosion inhibiting system is comprised of at least one corrosion inhibiting compound selected from a group consisting of azoles, insoluble ferric pyrophosphate, soluble ferric pyrophosphate, ferrous oxalate, ferric citrate, ferrous sulfate, ferric ammonium citrate, insoluble ferric orthophosphate, soluble ferric orthophosphate, ferric ammonium oxalate, ferric ammonium sulfate, ferric bromide, ferric sodium oxalate, ferric stearate, ferric sulfate, ferrous acetate, ferrous ammonium sulfate, ferrous bromide, ferrous gluconate, ferrous iodide, ferric acetate, ferric fluoroborate, ferric hydroxide, ferric oleate, ferrous fumarate, ferrous oxalate, ferrous oxide, ferric lactate, ferric resinate, and any combination thereof. Methods of making and using the same are also described. In addition, agricultural plant nutrients comprising the same are provided.